SEQUENCE LISTING

<110> Imperial College Innovations Limited

<120> Control of Gene Expression Using a Complex of an Oligonucleotide and a Regulatory Peptide

<130> ICOY/P27203CA

<160> 25

<170> PatentIN version 3.1

<210> 1
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> SAP18 chromatin inactivation domain

<220>
<221> MISC_FEATURE
<222> (1)..(3)
<223> AAA or DDD

<400> 1
Xaa Xaa Xaa Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile
1 5 10 15

Lys Lys Glu Pro Glu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro
20 25 30

Leu Leu Leu Arg Val Phe
35

<210> 2
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> MAD1 chromatin inactivation domain

<220>
<221> MISC_FEATURE
<222> (1)..(3)
<223> AAA or DDD

<400> 2
Xaa Xaa Xaa Met Asn Ile Gln Met Leu Leu Glu Ala Ala Asp Tyr Leu
1 5 10 15

Glu Arg Arg Glu Arg Glu Ala Glu His Gly Tyr Ala Ser Met Leu Pro
20 25 30

<210> 3
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Antennapedia homeodomain based Penetratins

<400> 3
Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
1 5 10 15

<210> 4
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> TAT peptide

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Cys-acetamidomethyl

<400> 4
Cys Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Cys
1 5 10 15

<210> 5
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> TFO Module 1 oligonucleotide

<400> 5
aaagtaaaag gggagagagg g 21

<210> 6
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Herpes Simplex Virus VP16 Transcriptional Activator protein

<400> 6
Gly Gly Gly Pro Ala Asp Ala Leu Asp Asp Phe Asp Leu Asp Met Leu
1 5 10 15

Pro Ala Asp Ala Leu Asp Asp Phe Asp Leu Asp Met Leu
20 25

<210> 7
<211> 55
<212> PRT
<213> Artificial Sequence

<220>
<223> Herpes Simplex Virus VP16 Transcriptional Activator protein

<400> 7
Gly Gly Gly Pro Ala Asp Ala Leu Asp Asp Phe Asp Leu Asp Met Leu
1 5 10 15

Pro Ala Asp Ala Leu Asp Asp Phe Asp Leu Asp Met Leu Pro Ala Asp
20 25 30

Ala Leu Asp Asp Phe Asp Leu Asp Met Leu Pro Ala Asp Ala Leu Asp

35 40 45

Asp Phe Asp Leu Asp Met Leu
50 55

<210> 8
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Human MAD1 transcriptional repressor domain

<220>
<221> MISC_FEATURE
<222> (1)..(3)
<223> AAA or DDD

<400> 8
Xaa Xaa Xaa Met Asn Ile Gln Met Leu Leu Glu Ala Ala Asp Tyr Leu
1 5 10 15

Glu Arg Arg Glu Arg Glu Ala Glu His Gly Tyr Ala Ser Met Leu Pro
20 25 30

<210> 9
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Human SAP18 polypeptide domain

<220>
<221> MISC_FEATURE
<222> (1)..(3)
<223> AAA or DDD

<400> 9
Xaa Xaa Xaa Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile Lys
1 5 10 15

Lys Glu Pro Glu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro Leu Leu
20 25 30

Leu Arg Val Phe
35

<210> 10
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Androgen receptor gene regulatory site primer 1

<400> 10
gggaaaggaa aagaggggag gg 22

<210> 11
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Androgen receptor gene regulatory site primer 2

<400> 11
gggaggggaa aggaaaagag g 21

<210> 12
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> ARP TFO

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> 2'-deoxy-6-thioguanine

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> 5-fluro-deoxyuracil

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> 2'-deoxy-6-thioguanine

<400> 12
gtguggtgtg gttgtgtt 18

<210> 13
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> L217 peptide

<400> 13
His His His His His His Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg
1 5 10 15

Arg Met Lys Trp Lys Lys Asp Asp Asp Met Asn Ile Ala Met Leu Leu
20 25 30

Glu Ala Ala Asp Tyr Leu Glu
35

<210> 14
<211> 54
<212> PRT
<213> Artificial Sequence

<220>
<223> L218 Peptide

<400> 14
His His His His His His Met Asn Ile Ala Met Leu Leu Glu Ala Ala
1 5 10 15

Asp Tyr Leu Glu Arg Arg Glu Arg Glu Ala Glu His Gly Tyr Ala Ser
20 25 30

Met Leu Pro Asp Asp Asp Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg
35 40 45

Arg Met Lys Trp Lys Lys
50

<210> 15
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Human androgen receptor primer sense

<400> 15
tccagaatct gttccagagc g 21

<210> 16
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Human androgen receptor primer antisense

<400> 16
ttcggatact gcttcctgc 19

<210> 17
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> IRE TFO

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> 5-fluro-deoxyuracil

<400> 17
ggguggtggg gttgtgtt 18

<210> 18
<211> 54
<212> PRT
<213> Artificial Sequence

<220>
<223> L219 Peptide

<400> 18
Asp Asp Asp Met Asn Ile Ala Met Leu Leu Glu Ala Ala Asp Tyr Leu
1 5 10 15

Glu Arg Arg Glu Arg Glu Ala Glu His Gly Tyr Ala Ser Met Leu Pro
20 25 30

His His His His His His Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg
35 40 45

Arg Met Lys Trp Lys Lys
50

<210> 19
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Progesterone Receptor Forward primer

<400> 19
tccagaatct gttccagagc g 21

<210> 20
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Progesterone Receptor Reverse primer

<400> 20
ttcggatact gcttcctgc 19

<210> 21
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> ?-actin Forward primer

<400> 21
ttttcgcaaa aggaggggag 20

<210> 22
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> ?-actin Reverse primer

<400> 22
aaaggcaact ttcggaacgg 20

<210> 23
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> DDD-MAD1-DDD-NLS peptide

<400> 23
Asp Asp Asp Met Asn Ile Gln Met Leu Leu Glu Ala Ala Asp Tyr Leu
1 5 10 15

Glu Arg Arg Glu Arg Glu Ala Glu His Gly Tyr Ala Ser Met Leu Pro
20 25 30

Asp Asp Asp Pro Lys Lys Lys Arg Lys Val
35 40

<210> 24
<211> 42

<212> PRT
<213> Artificial Sequence

<220>
<223> DDD-NLS-DDD-MAD1 peptide

<400> 24
Asp Asp Asp Pro Lys Lys Lys Arg Lys Val Asp Asp Asp Met Asn Ile
1 5 10 15

Gln Met Leu Leu Glu Ala Ala Asp Tyr Leu Glu Arg Arg Glu Arg Glu
20 25 30

Ala Glu His Gly Tyr Ala Ser Met Leu Pro
35 40

<210> 25
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> SV40 T-antigen NLS peptide

<400> 25
Pro Lys Lys Lys Arg Lys Val
1 5